

Abstract

Resonator and component with hermetic encapsulation

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Proposed is a resonator which works with bulk acoustic waves and is based on a layer structure known in the art, which is arranged over a substrate. According to the invention, the total surface of the layer structure, including all resonators contained therein, is covered with a dielectric layer and a metal layer which together form an acoustic mirror, a low-k dielectric being used for the dielectric layer. The total-surface mirror offers broadband functionality over a suitable frequency range. The dielectric contained within the mirror acts as a sealing protective layer for the resonator or resonators.

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Figure 5

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